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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/384,675      08/27/99      ARNOLD

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EXAMINER
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FUREMAN, J	
ART UNIT	PAPER NUMBER

2876

DATE MAILED:

04/25/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

# Office Action Summary

Application No.

09/384,675

Applicant(s)

ARNOLD ET AL.

Examiner

Jared J. Fureman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 11 January 2001 and 09 February 2001.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 8-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 8-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.

- 18) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. Receipt is acknowledged of the amendment filed on 1/11/2001 and the supplemental amendment filed on 2/9/2001, which have been entered in the file. Claims 8-36 are pending.

#### *Claim Objections*

2. Claims 20 and 30 are objected to because of the following informalities:  
  
Re claim 20, line 6: "section" should be replaced with --sections--.  
  
Re claim 30, line 7: "the" should be replaced with --a--, in order to avoid a lack of proper antecedent basis, and line 9, "a" should be replaced with --the--.  
  
Appropriate correction is required.

#### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 8-10, 19, 23, 24, 28-31, 35, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukumoto et al (US 5,047,615, previously cited).

Re claims 23 and 30: Fukumoto et al teaches a portable printer (3) and a portable data entry device (1) connected thereto, the portable data entry device including an elongate data entry device housing having a front end, a scanner (2) disposed at the front end of the data entry device housing for scanning a label, a display (4) and a plurality of manually operable keys (5), the printer including an elongate

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printer housing having a front portion with a compartment adapted to receive the data entry device, the printer housing further having a rear portion, the printer housing providing space at the rear portion for receiving a roll of a label web (as can be seen in figure 1, the printer housing includes tabs which receive and support a roll of label web (6)), a print module (45) disposed at the rear portion of the printer housing, and the print module including a thermal print head (not shown) and a platen roll (not shown) cooperable with the print head for printing on the label web, the compartment has an open top and an open front end, the compartment is transversely channel-shaped, the compartment is open at the end of the front portion to slidably receive the data entry device through the open end of the compartment (since a portion of the data entry device fits under the retaining piece 8, the data entry device must be tilted and slid into position) (see figures 1-5, column 1 lines 8-15, 23-36, 43-49, column 1 line 60 – column 2 line 3, and column 2 line 39 – column 4 line 23). Fukumoto et al also teaches a battery (49) disposed within the housing for powering the print head (see figure 5), and the compartment of the printer housing having a substantially open top portion to enable access to the display and the keys (see figures 1 and 2).

Fukumoto et al fails to specifically teach the scanner disposed in the front end of the data entry device.

However, it was well known to those of ordinary skill in the art at the time of the invention that a laser scanner within a housing is an art recognized functional equivalent of a wand type scanner (the scanner 2, as taught by Fukumoto) external to a housing.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to integrate, with the system as taught by Fukumoto, teach the scanner disposed in the front end of the data entry device (by replacing the wand type scanner with a laser scanner within the housing), since they are art recognized functional equivalents. Furthermore, a laser scanner has the advantage of non-contact reading as compared to a wand type scanner, which requires the operator to be in close proximity to the bar code and to manually move the scanner over the bar code.

Re claims 24, 28, 29, 31, 35, and 36: Fukumoto et al also teaches the compartment including means (retaining piece 8) for retaining the data entry device on the printer, the compartment is channel-shaped, and the printer housing has a surface for receiving the user's hand (see figures 1 and 2).

Re claims 8 and 19: Fukumoto et al fails to specifically teach the battery being disposed at the front portion, an elongate circuit board disposed in the housing, the battery being on the printed circuit board at the front portion of the housing, and a print module mounted to the circuit board at the rear portion of the housing.

However, if not inherent in Fukumoto et al, it was well known to those of ordinary skill in the art at the time of the invention to dispose a battery at a front portion of a housing, and include a circuit board shaped to fit in a housing for connecting components of a device.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to integrate, with the system as taught by Fukumoto et al, the battery disposed at the front portion, an elongate circuit board disposed in the housing,

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the battery being on the printed circuit board at the front portion of the housing, and a print module mounted to the circuit board at the rear portion of the housing, in order to provide easy access to the battery, and to provide a secure electrical connection between the components of the system.

Re claims 9 and 10: Fukumoto et al also teaches an optical connector (9) for connection to a data entry device (see figure 2).

Fukumoto et al fails to teach an electrical connector at the rear end of the compartment for connection to a data entry device, a plurality of adjacent batteries, a separator between each pair of adjacent batteries, and the separators being secured to the printed circuit board.

However, it was well known to those of ordinary skill in the art at the time of the invention that electrical connectors are an art recognized functional equivalent to an optical connector, to place an electrical connector at the rear of a compartment, to include a plurality of batteries in a device, a separator between each pair of adjacent batteries, and the separators being secured to a printed circuit board.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to integrate, with the system as taught by Fukumoto et al, an electrical connector at the rear end of the compartment for connection to a data entry device, since an electrical connector is an art recognized functional equivalent of an optical connector, a plurality of adjacent batteries, a separator between each pair of adjacent batteries, and the separators being secured to the printed circuit board, in order to provide a guide for easily inserting the batteries.

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5. Claims 11-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukumoto et al in view of Sherman et al (US 5,110,226).

The teachings of Fukumoto et al have been discussed above. Fukumoto et al also teaches the open-ended channel-shaped compartment adapted to slidably receive the data entry device through the open end of the compartment (since a portion of the data entry device fits under the retaining piece 8, the data entry device must be tilted and slid into position) (see figures 1 and 2).

Fukumoto fails to teach the housing providing an internal space at the rear portion for receiving a roll of a label web, an access opening in the housing between the compartment and the inside of the housing, the battery being accessible through the access opening, including a door for the opening movable between closed and open positions.

Sherman et al (US 5,110,226) teaches a portable printer (24), comprising: an elongate housing (28), the housing having a rear portion, the housing providing an internal space (98) at the rear portion for receiving a roll of a label web (99), an access opening in the housing to the inside of the housing, a battery (106) being accessible through the access opening, including a door (110) movable between closed and open positions (see figures 1-3 and column 6 line 62 - column 7 line 31).

In view of Sherman et al's (US 5,110,226) teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to include, with the system as taught by Fukumoto et al, the housing providing an internal space at the rear portion for receiving a roll of a label web, an access opening in the housing between the

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compartment and the inside of the housing, the battery being accessible through the access opening, including a door for the opening movable between closed and open positions, in order to protect the label web (since this is the function of the cavity 98 and the printer cover 101), and to allow easy installation and removal of the battery.

6. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fukumoto et al in view of Goodwin et al (US 5,486,259).

The teachings of Fukumoto et al have been discussed above.

Fukumoto et al fails to specifically teach the housing having a pair of opposed substantially mirror-image connected housing sections.

Goodwin et al teaches a portable printer (10) including a housing (11) having a pair of opposed substantially mirror-image connected housing sections (35 and 36) (see figures 1-3 and column 3 lines 11-3).

In view of Goodwin et al's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to include, with the system as taught by Fukumoto et al, the housing having a pair of opposed substantially mirror-image connected housing sections, in order to easily allow insertion of the internal components during manufacturing.

7. Claims 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukumoto et al as modified by Sherman et al in view of Goodwin et al.

The teachings of Fukumoto et al as modified by Sherman et al have been discussed above.



Fukumoto et al as modified by Sherman et al fails to specifically teach the housing having a pair of opposed substantially mirror-image connected housing sections.

The teachings of Goodwin et al have been discussed above.

In view of Goodwin et al's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to include, with the system as taught by Fukumoto et al as modified by Sherman et al, the housing having a pair of opposed substantially mirror-image connected housing sections, in order to easily allow insertion of the internal components during manufacturing.

8. Claims 25-27 and 32-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukumoto et al in view of Sherman et al (US 5,186,558).

The teachings of Fukumoto et al have been discussed above.

Fukumoto et al fails to teach the compartment having a pair of retaining flanges overlying the portable data entry device, means for latching the data entry device to the printer, a latch for latching the data entry device to the printer.

Sherman et al (US 5,186,558) teaches a portable printer (15) and data entry device, the portable printer includes a compartment (data entry terminal cavity 35) for receiving the data entry device, the compartment having a pair of retaining flanges (45) overlying the portable data entry device, means for latching the data entry device to the printer, a latch (resilient protrusion 42) for latching the data entry device to the printer (see figure 1, column 3 lines 56-65, and column 5 lines 1-32).

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In view of Sherman et al's (US 5,186,558) teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to include, with the system as taught by Fukumoto et al, the compartment having a pair of retaining flanges overlying the portable data entry device, means for latching the data entry device to the printer, a latch for latching the data entry device to the printer, in order to provide a more secure connection between the portable printer and data entry device.

### ***Response to Arguments***

9. Applicant's arguments filed 1/11/2001 and 2/9/2001 have been fully considered but they are not persuasive.

In response to applicants argument that the housing (of Fukumoto et al) does not provide space for receiving a label roll, rather the roll is outside the housing (see page 7 of the amendment filed on 1/11/2001), as can be seen in figure 1 of Fukumoto, the printer housing includes tabs which receive and support a roll of label web (6). Claim 8 does not require that the label roll is held within a compartment of the housing, thus, Fukumoto et al meets the claimed limitation of providing space for receiving a label roll.

In response to applicants argument that there is no disclosure in the reference of any battery at the front portion of an elongate printed circuit board or of a print module mounted in the rear portion of the circuit board (see page 7 of the amendment filed on 1/11/2001), the office action did not state that Fukumoto et al teaches these feature, rather the office states that these features were well known to those of ordinary skill in the art at the time of the invention (Official Notice). Applicants have not traversed the use of Official Notice, but merely state that the Fukumoto et al reference does not teach

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these feature (which the office action acknowledges). Applicant must seasonably challenge well known statements and statements based on personal knowledge when they are made by the Board of Patent Appeals and Interferences. In re Selmi, 156 F.2d 96, 70 USPQ 197 (CCPA 1946); In re Fischer, 125 F.2d 725, 52 USPQ 473 (CCPA 1942). See also In re Boon, 439 F.2d 724, 169 USPQ 231 (CCPA 1971) (a challenge to the taking of judicial notice must contain adequate information or argument to create on its face a reasonable doubt regarding the circumstances justifying the judicial notice). If applicant does not seasonably traverse the well known statement during examination, then the object of the well known statement is taken to be admitted prior art. In re Chevenard, 139 F.2d 71, 60 USPQ 239 (CCPA 1943). A seasonable challenge constitutes a demand for evidence made as soon as practicable during prosecution. Thus, applicant is charged with rebutting the well known statement in the next reply after the Office action in which the well known statement was made. This is necessary because the examiner must be given the opportunity to provide evidence in the next Office action or explain why no evidence is required. If the examiner adds a reference to the rejection in the next action after applicant's rebuttal, the newly cited reference, if it is added merely as evidence of the prior well known statement, does not result in a new issue and thus the action can potentially be made final. If no amendments are made to the claims, the examiner must not rely on any other teachings in the reference if the rejection is made final (see MPEP 2144.03). Furthermore, how would one of ordinary skill in the art at the time of the invention reasonably expect Fukumoto et al to provide

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an electrical connection between the components shown in figure 5, other than using a conventional circuit board shaped to fit within the elongated housing?

In response to applicants argument that the Fukumoto et al patent discloses a device wherein the data entry device can only be dropped into an open-top recess and is not slidable through an open end of an open-ended channel-shaped compartment (see page 8 of the amendment filed on 1/11/2001), the data entry device (1) of Fukumoto et al cannot simply be dropped into the open-top recess of the portable printer, the housing of the portable printer includes a retaining piece 8 which extends over the upper portion of the data entry device (computer 1) (see figures 1, 2, and column 3 lines 9-12). As can be seen in the drawings, if the data entry device was simply dropped into the open-top recess the data entry device would strike the retaining piece 8 and would not enter the recess. Thus, it is necessary when placing the data entry device into the recess that the data entry device <sup>must be tilted</sup> and slid under the retaining piece 8. While Fukumoto et al teaches a small lip at the end of the compartment (as seen in figure 2), the lip only extends over a very small portion of the entire height of the recess/compartment, therefore, the end of the recess/compartment can be considered open-ended and the data entry device may be slid through an open end of the open-ended channel-shaped recess/compartment so as to be inserted under the retaining piece 8.

Applicants other arguments regarding features in the newly added claims are rendered moot in view of the new grounds of rejection.

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***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Schultz et al (US 5,679,943) and Richardson et al (US 5,111,216) both teach a portable printer and data entry device, the portable printer including an open-ended channel-shaped compartment for receiving the data entry device (see figures 36 and 40 of Shultz et al and figures 1-3 of Richardson et al). Schultz et al (US 5,542,487) teaches a portable printer having a housing for supporting an elongated circuit board (36) within the housing (see figures 1 and 3).

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jared J. Fureman whose telephone number is (703)

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305-0424. The examiner can normally be reached on 7:00 am - 4:30 PM M-F, first Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (703) 305-3503. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

*jjf*

jjf  
April 23, 2001

  
**MICHAEL G. LEE**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2800**